

# **BITUMINOUS**

waterproofing solutions



bitumen-polymer distilled membranes

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### **ALMOST A CENTURY OF EXPERIENCE**

IMPERIA ITALIA was founded in Turin in 1936 for the production of water proofing products, sealants and bitumen emulsions, used to waterproof roofs, foundations, water basins, dams, channels and other construction works.

Subsequently, the Company responded - by manufacturing special coverings - to a growing need on the market to protect large structures and steel systems from corrosion (viaducts, tanks, penstocks, large structural metal works).

Next IMPER ITALIA completed the above-mentioned products and protective cycles with the production of formulated products for the protection, maintenance and restoration of concrete works.

All of this took place while the Company was affirming its position in the waterproofing sector as one of the worldwide leaders in the production of bitumen-polymer waterproofing membranes (during the 60's) and of new generation synthetic membranes made of TPO/FPA polypropylene based elastomerised polyolefin (during the 90's).

On December 1 $^{\rm st}$  2014 it became part of the great industrial group Technonicol Construction Systems, active on the Russian market.



### **CERTIFICATIONS**



IMPERITALIA HAS ALWAYS BEEN ACTIVE IN IMPROVING ITS PRODUCTION PROCESSES, IN ORDER TO ENSURE MANAGEMENT ACCORDING TO EFFICIENCY, EFFECTIVENESS AND COST LOWERING CRITERIA.

### THE QUALITY MANAGEMENT

SYSTEM

#### QUALITY MANAGEMENT

In 1995 IMPER ITALIA obtained Certification of its own **Quality Management System according to International standard ISO 9001**, focusing its attention on Customer satisfaction through the "Continuous improvement" concept and insuring conformity to customer and applicable binding requirements.

#### **WORKPLACE HEALTH AND SAFETY**

Through the effort of all levels and company roles, in particular of the highest Management levels, the IMPER ITALIA organisation has implemented a workplace Health and Safety management System in order to satisfy requirements defined by law and Company Policy in terms of workplace Health and Safety obtaining certification of its own Management System in conformity to the OHSAS 18001 Standard in 2009.

#### ENVIRONMENTAL MANAGEMENT

Furthermore, always demonstrating its focus on obtaining a good environmental performance level, IMPER ITALIA adopted an Environmental Management System certified since 2012 in conformity to the ISO 14001 international Standard that allows its Organisation to develop environmental policies, establish objectives and processes while keeping the environmental impact of its activities, products under control, in order to satisfy both legal limits and the requirements of our own Policy.





### **CERTIFICATIONS**

### **CERTIFICATIONS**

WORLDWIDE

IMPER PRODUCTS SUBJECT TO SPECIFIC TESTS BY BODIES AND QUALIFIED LABORATORIES, ARE CERTIFIED IN THE MAIN COUNTRIES AROUND THE WORLD.

Agrèments and product Certifications issued by UEAtc Institutes (Union Europèenne pour l'Agrèment Technique dans la construction), Certifications issued by overseas Institutes (USA, New Zealand, Japan) to which one must add recognitions and approvals issued by national companies (ENEL, FFSS, Società Autostrade) that confirm the high level positioning of IMPER ITALIA in relation to the quality of the manufactured products.



#### PROCESS/PRODUCT CERTIFICATION

Due to the growing demand for products with a lower environmental impact, the bituminous membranes produced by IMPER ITALIA have a **process/product certification** that defines the percentage (%) of recycled material content according to defined parameters:

#### RATING SYSTEMS

National and international, aimed at sustainable construction. (LEED Reg. - Leadership in Energy and Environmental Design).

#### · UNI EN ISO 14021

Environmental Labels and Declarations.
Self-declared environmental claims (Type II environmental labelling).



SYSTEM FOR QUALITY MANAGEMENT



SYSTEM FOR ENVIRONMENTAL MANAGEMENT



HEALTH AND SAFETY AT WORK



(GBC)
SUSTAINABLE
CONSTRUCTION

### **FEATURES**



IN ORDER TO OBTAIN GOOD LONG LASTING RESULTS, ONE MUST START FROM THE CORRECT DESIGN, FAVOURING QUALITY PRODUCTS AND INSTALLERS THAT COMPLY WITH MANUFACTURER INSTRUCTIONS.

### **QUALITY**

### AND INSTALL ATION

An important document for this sector, which should always be handled by waterproofing professionals, is the CODE OF PRACTICE for Continuously Supported Coverings by IGLAE (Istituto per la Garanzia dei Lavori Affini all'Edilizia - Institute Guaranteeing Works related to Construction).

Regarding membrane manufacturing, the raw materials must be continually checked and, due to their variety, compound formulation must be constantly adapted to those available.

This implies a wealth of expertise, support from an equipped laboratory, efficient production plants and processes, equipped with adequate controls and especially a well-rooted quality philosophy.

#### **WEIGHT**

There are misinterpretations, for example, regarding the grammage of "non-woven fabrics" of the polyester reinforcing mat.

The weight of this reinforcing mat is not of absolute importance since the quality evaluation must only refer to the entirety of technical characteristics and the performance: this performance in fact, is not connected exclusively to the weight, but

to the composition and processing of the reinforcing mat, in synergy with the polymer distilled bitumen compound that it is co-extruded in.

In recent years, the use of reinforced polyester "non-woven fabrics", with glass fibres or nets, has developed in order to make the polymer distilled bitumen membranes even more stable, dimensionally.

#### COLD FLEXIBILITY

Another misinterpretation takes place when confusing the "cold flexibility" of polymer distilled bitumen membranes with the possible "cold" breakage of the membranes during installation.

"Cold flexibility" is a value obtained in laboratory under test conditions according to the EN Standards that make it possible to obtain values that can be compared to the same product or between different products, without having any direct influence on unrolling the membranes at the construction site under various temperature conditions. Unrolling rolls in the construction site is much more severe than laboratory test

conditions and absolutely cannot be repeated.

The rolls may be subject to low temperature conditioning for weeks (outside or in construction sites) and a few hours of sun are not sufficient to bring back the inside of the roll to the application temperature (min. +5°C).

During installation, the unrolling time may be very fast (by kicking).

Since one of the determining factors for the positive result a waterproofing is the correct design, it is necessary to adopt waterproofing / insulation systems suitable for the types of structures treated and the use they are intended for, without overlooking the operational details of the surrounding works (drains, joints, thresholds, etc...).

Finally, one must consider the application quality, since product performance depends heavily on the skills of the installer.

The person installing it must therefore dose the flame and splice the sheets carefully as well as use adequate techniques to carry out surrounding works.











UPON SUPERFICIAL EXAMINATION, THE MEMBRANES OF DIFFERENT MANUFACTURERS LOOK THE SAME. THEY STAND OUT, HOWEVER, IN THEIR RELIABILITY, AS IN THE ABILITY TO RESIST OVER TIME, ONCE THEY HAVE BEEN APPLIED, THEIR ORIGINAL CHARACTERISTICS, WITH MINIMAL DECAY RATE, COMPARED TO THE MATERIAL USED.

# THE "AGRÉMENTS" QUALITY CERTIFICATES

A support for choosing the best membranes is offered by the "Technical suitability certificate" (Agrément technique) issued by the Official Institutes of the UEAtc (Union Européenne pour l'Agrément technique dans la construction), that groups together the most important Institutes of eleven European Countries. This Body has issued common directives regarding test methods and performance values, as well as application systems, to be able to perform the quality evaluation of the prefabricated polymer distilled bitumen membrane and of many other innovative materials intended for construction.

The BBA operates in England, the UBATC in Belgium, the CSTB in France, and so on and so forth in other European countries. These Institutes, when asked of the requesting manufacturer, take a sample of a specific product and carry out a preliminary investigation on product applications made over time.

They also carry out laboratory analysis, both on new product samples (in production and in stock), as well as on products applied over time, as well as in construction sites where the product being investigated is being applied. This is done in order to ensure that said product is truly compliant with the sample, using a complex and well-structured procedure.

The Agrément can only be issued to the requesting company at the end of all controls required by the procedure, controls that however are repeated, without giving advance notice, for the entire duration (five years) of the issued certificate. Upon expiration, the procedure is started over again. The institutes that issued an Agrément to our Companies periodically carry out controls on our self-monitoring system throughout the validity of the document.

# **QUALITY**IN SERVICES

The performance quality of the waterproofing membranes also depends on their installation; IMPER ITALIA has a technical assistance service, competent in design and installation techniques, available for the most complex waterproofing problem, for product development, research, on site diagnostic

visits, for training installers (at a specific Training Centre in the Mappano Plant), for up-

dating designers, to study solutions and technological systems aimed at optimising costs, for support in special works construction sites.



The IMPER ITALIA philosophy - understood as the set of essential principles of their own laws that guide the business - focus on "customer satisfaction", with reference to the final user of the building.

The industrial vocation of IMPER ITALIA is expressed in complete consistency, gearing towards productions that aim at increasing the "problem solving" capacity in the building protection field, where the waterproofing concept is extended to its effects, in addition to water, also the infiltration of aggressive agents of any nature, in buildings.



The new service, called Roofing Management Program, is reserved for Important Customers and Large Projects, and consists in a new highly professional and integrated approach for design suggestion and the realisation of advance and environmentally friendly solutions for waterproofing roofs.



### **CE MARKING**



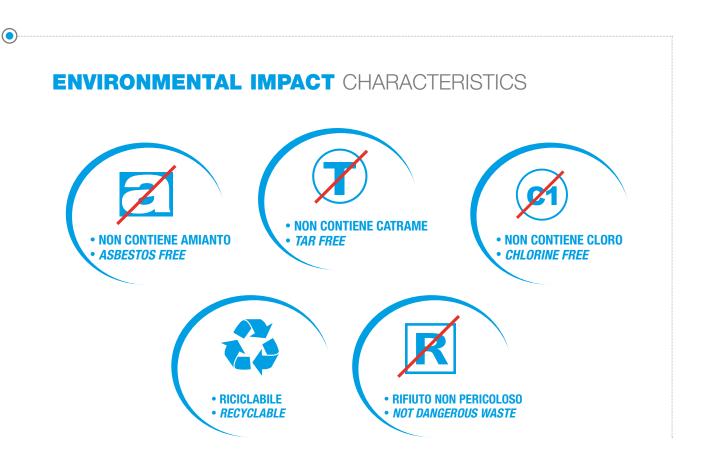
THE WATERPROOFING MEMBRANES IN POLYMER DISTILLED BITUMEN, DESTINED TO SPECIFIC FIELDS OF USE, ARE SUBJECT TO MANDATORY CE MARKING. IT IS THEREFORE PROHIBITED TO PLACE ON THE MARKET, FREE CIRCULATION THROUGHOUT THE EUROPEAN COMMUNITY, BITUMEN MEMBRANES WITHOUT CE MARKING (FOR THE USES WHERE THE OBLIGATION IS APPLICABLE).



## THE CE MARKING

Is necessary to certify suitability of the membrane for the specified uses, and is intended to safeguard the consumer. It is placed by the manufacturer based on Regulation (EU) n. 305/2011 of the European Parliament and the council of March 9<sup>th</sup> 2011 (that sets harmonised conditions for the commercialisation of construction products and that repeals directive 89/106/EEC of the Council), under supervision of a Notified Body, for certification and supervision attesting conformity of the "factory production control".

- THE MANUFACTURER IS RESPONSIBLE operationally to structure suitable manufacturing and control activities that are suitable to obtain waterproofing membranes that comply with the harmonised reference standards for each specific intended use.
- THE NOTIFIED BODY IS GIVEN THE RESPONSIBILITY of carrying out an initial evaluation of the manufacturer, certifying the production system and/or the product, and keeping an effective periodic verification plan active.



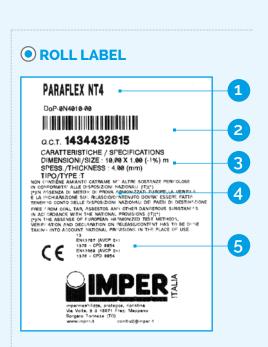


# THE ELEMENTS OF MARKING

# EACH ROLL CONTAINS THE FOLLOWING INFORMATION (CONTAINED ON A LABEL, ON THE PACKAGING CONVEYORS, ON SILK-SCREEN PRINTED FILM, ETC...):

- CE symbol followed by the last two digits of the when it was applied for the first time;
- Product Certification number or FPC;
- · product name;
- · unique product identification code;
- reference to the performance declaration;
- length and width;
- · weight or thickness;
- any performance Classes (for specific uses);
- · declaration that hazardous substances are absent;
- · identification number of the notified body.

Besides indications required by the CE Marking, the IMPER rolls are individually identified with the QCT (*Quality Control Ticket*) reference, which allows complete product traceability.



- 1 Product Name
- 2 N. of quality control ticket (QCT)
- **3** Roll dimensions and weight/thickness
- **4** Declaration that hazardous substances are absent
- $\mathbf{5}$   $\blacktriangleright$  CE Symbol and reference standards for fields of use



- 1 Product Name
- 2 Dimensions and weight
- **3** Upper/lower finish and roll thickness
- 4 N. rolls per pallet and N. pallet

### **DOCUMENTATION**



### **ACCOMPANYING**

TECHNICAL DOCUMENT (ATD)

The Accompanying Technical Document (ATD) synthetically summarises a complete series of information on the product delivered and its correct use.

- CONTAINING a brief description of the membrane and the most important technical characteristics.
- INDICATING the installation methods.
- · SPECIFYING the fields of use.
- HAVING the CE Mark and the last two digits of the year the mark is applied, along with reference to the Notified Body issuing the CE Certificate.







### **DECLARATION** OF PERFORMANCE (DoP)

It describes performance of the products to be built in relation to their essential characteristics, as defined in the harmonised reference standards. The DoP (Declaration of Performance) replaces the conformity declaration previously foreseen by Directive 89/106/EEC and accompanies each product supplied, where even the information contained in the ATD is integrated into a single document.



#### MANUFACTURER RESPONSIBILITY

- · ORGANISING and maintaining efficient a production control system (FPC).
- CHARACTERISING the product with initial type tests (ITT).
- · CARRYING OUT periodic verifications according to a specific test plan.
- DRAFTING the protection declaration and placing the CE Marking.

#### RESPONSIBILITY OF THE NOTIFIED BODY

- · CARRYING OUT any initial testing directly (based on reference standards).
- CERTIFYING the production control system.
- · CARRYING OUT supervision of the control system.

#### **USER RESPONSIBILITY**

- CHOOSING the membrane suitable for the use foreseen based on the intended use indicated by the manufacturer.
- · MAKING SURE that the material received is duly marked CE.





# **SUPPORTS**FOR SALES

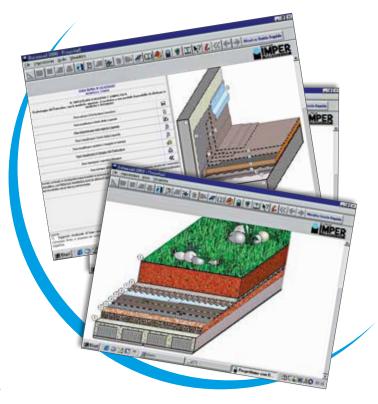
- · Internet website: www.imper.it
- · Technical data sheets for products in the product list.
- · Explanatory pamphlets for certain products.
- Division price list, constituting a mini guide of the production and its main characteristics.
- Product samples.
- · Documents presenting the Company.
- · Dataquad 2000.
- Design suggestions.



In 1989, IMPER ITALIA presented DATAQUAD, the first in the waterproofing sector that helped the designer prepare specifications.

It was a "menu" program containing a limited number of pre-established solutions both for the design and text. Always careful at staying abreast of change, IMPER ITALIA realised it was time for revising the DATAQUAD program.





DATAQUAD 2000, an innovative program for the sector of waterproofing, because it is the first one in Italy that, in technical terms, can be defined "expert, interactive guided", applied to designing waterproofing of roofs using distilled bitumen polymer membranes.

DATAQUAD 2000 is a true work instrument intended for designers and installers, thanks to its clearness and completeness.

The program allows more than 60,000 different solutions for drawings, stratigraphies (in axonometric projection, scaled on various layers) and specification solutions with executive particulars, thereby covering almost all standard solutions for waterproofing coverings, normally used in Italy. DATAQUAD 2000 also contains all of the technical data sheets for all of the mentioned products.

The DATAQUAD 2000 is in line with the "Practice Code – IGLAE" (Continuous Roofs waterproofing), that represents, currently, the only technical reference document.

Along with the design program, there is also a presentation that, besides supplying information on IMPER ITALIA, contains an actual "instructions course", regarding the history and evolution of waterproofing, with an important part dedicated to the correct methods for design and application of the seal element, made of a polymer distilled bitumen membranes, with reference to UNI standards and practical suggestions.

### PRODUCTS AND FIELDS OF USE



### **PRODUCTS**

THE BITUMINOUS SECTOR OFFERS THE MARKET A WIDE RANGE OF WATERPROOFING PRODUCTS: FROM THE POLYMER DISTILLED BITUMEN PREFABRICATED MEMBRANES, TO THE SYNTHETIC LIQUID WATERPROOFING SUBSTANCES, TO BITUMEN EMULSIONS, TO INSULATING SYSTEMS, COUPLED WITH COMPLEMENTARY PRODUCTS, ETC.

# (MBDP) POLYMER DISTILLED BITUMEN MEMBRANE

There are always more and more Countries where the legislation foresees the use of materials with technical characteristics and specific performance, controlled and certified by official Institutions.

A significant quantity of membranes of the BITUMEN SECTOR has such recognitions, referred to product quality, obtained in different Countries of the world.

The membranes are made in the production facility of the IMPER Sector, certified as compliant with ISO 9001 standard that ensures the quality of production processes. The variety of prefabricated polymer distilled bitumen membranes includes:

- membranes with plastomeric based compound (Atactic Polypropylene APP) of the black type self-protecting with mineral slate flakes, reinforcing mat made in "non-woven fabric" made of polyester, even stabilised, or "glass fibre";
- membranes with elastomeric-based compound (Styrene Butadiene Styrene: SBS) in the black and self-protective types with mineral slate flakes, or metal blades, reinforcing mat in polyester "non-woven fabric" or "glass fibre";
- membranes with elastoplastomeric PARALLOY® compound with metallocene resin base that is similar to the best characteristics of the SBS and APP compounds.

Two series of products are made with this compound: PARALON PLUS and PARALON PLUS FIRE.

The latter contains the PARALLOY® additive, with special substances that give the membrane particular self-extinguishing and fire resistant properties. The co-extruded reinforcing mat is made of polyester "non-woven fabric", duly compatabilised, or "non-woven fabric" made of stabilised polyester.

They are in the black and self-protective with mineral slate flakes type.

#### RECOMMENDED USES

#### THE RANGE COVERS ALL WATERPROOFING NEEDS:

- · roofs of any type;
- · foundations and walls against the ground;
- · decks, bridges, viaducts;
- · basins, channels, water works;
- · roof gardens, balconies-parking lots;
- · top surfaces of artificial tunnels;
- inverted roofs;
- · etc...

In the following pages only a few of the membranes of current production and other numerous products that are successfully made for Italy and overseas markets.

#### OTHER PRODUCTS

Protective paints for waterproofing surfaces, synthetic waterproofing liquids, bitumen emulsions and solutions, products for protection and drainage, special adhesives, primers, insulating thermal material coupled and not, the bituminous tiles complete the range of the BITUMEN SECTOR, confirming their specialisation.

The characteristics of each product, summarised in tables, make it possible to perceive the completeness and the level of specialisation.

Specific documentation is available to complete all information requirements.





### PARALON PLUS SERIES

The PARALON family has been available on the market for 45 years. Along with the unique technical characteristics, that make PARALON PLUS reliable in terms of performance and duration, the ITC Agreement, has issued certification and validity of the PARALON PLUS series, articulated with different versions suitable for the most varied design and application needs, they are produced with classic, talc or slated surfaces and with TEXTENE® finish.

- The first Agrément referred to an entire series of products, the PARALON PLUS range, instead of a single product.
- The first Agrément referred to fire performance.
- · The first Agrément certifying product versions with different types of reinforcing mat: classic polyester from continuous thread, polyester from stabilised continuous thread, composite.
- · The first Agrément certifying thicknesses that are both 3 mm and 4 mm.

The products of the PARALON PLUS series are obtained by co-extrusion of a compound called PARALLOY®, with metallocene resin base with selected molecular weight, dispersed in distilled bitumen and "non-woven fabric" reinforcement made in continuous thread polyester, in certain products stabilised with glass fibres, duly compatabilised.

The lower face is protected by **TERMOTENE®** hot melt film that improves application and adhesion to the support to be waterproofed.

The PARALLOY® compound summarises the best characteristics of SBS and APP compounds.



#### THE CURRENT PARALON PLUS FAMILY IS AVAILABLE IN THE FOLLOWING PRODUCTS:

PARALON NT PLUS ST

· PARALON COLD

PARALON ARD/HS PLUS ST

PARALON FIRE COLD

PARALON ARD/HS PLUS ST FIRE PARALON COLD HP

PARALON ARD/S PLUS ST FIRE

· PARALON COLD HP AR

PARALON ANTI-ROOT

PARALON PLUS MS

#### CERTIFICATIONS

Constant verifications conducted by UEAtc Institutes on the products with Agrément and Certifications of International Institutes, along with strict quality controls of the IMPER Sector that works for quality assurance and management according to the ISO 9001 standard, guaranteeing high level performance and aesthetic standard of PARALON PLUS and certify their reliability and long duration.

The PARALON PLUS FIRE products are certified by the Belgian Institute UBAtc, according to the EN 1187-1 European standard.

The black membranes of the PARALON PLUS series can be supplied with the talc upper face as well as with the TEXTENE® finish that significantly improves all characteristics of the very membranes.

### Agrément UEAtc:









#### International certifications:















### **NEW PERSONALISATION FOR TERMOTENE®**

AND FOR CAPS IN THE PARALON RANGE

IN ORDER TO GUARANTEE ORIGIN AND AUTHENTICITY OF THE VARIOUS PRODUCTS OF THE PARALON RANGE EVEN MORE AND THEREFORE AVOID SALES OF COUNTERFEIT PRODUCTS, A DECISION WAS MADE TO "CUSTOMISE" THIS RANGE EVEN MORE.

\*\*THIS RANGE EVEN MORE.\*\*

To celebrate the 80 years of IMPERITALIA, new blue graphics were designed for TERMOTENE® with the wording PARALON in large letters.

The image of the white polyethylene cap used as packaging for pallets was changed.

\*\*THE IMAGE EVEN MORE.\*\*

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### **COMPOSITION**

### **MIXTURE**

This is the waterproofing part of the product. It is called mixture because it is a special formula of selected bitumen and particular polymers. The different types of mixture differ mainly because of the type of polymer used.

#### THE MAIN POLYMERS ARE:

- SBS These give the mixture characteristics of optimal workability at low temperatures, great resistance to mechanical stress and optimal elastic behaviour. The SBS mixtures are also called ELASTOMERIC. The have the limit of not being stable at high temperatures and they are not resistant to U.V. rays.
- APP These give the mixture optimal resistance to U.V. rays and optimal stability to high temperatures. The APP mixtures are also called PLASTOMERIC.

Their limit is that they are less elastic and less flexible at low temperatures.

### REINFORCEMENT

This is the internal part of the membrane that supports the mixture.

#### THEY CAN BE:

#### · GLASS FIBRE

They provide dimensional stability and non-degradable quality to the product (VV).

#### POLYESTER STAPLE FABRIC

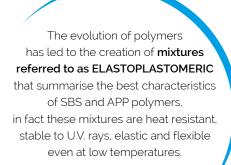
They provide good mechanical resistance (NT).

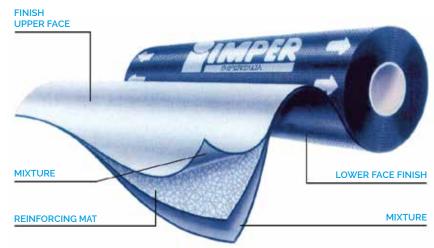
#### · CONTINUOUS THREAD POLYESTER

They provide the best mechanical properties to the product (FC).

#### STABILISED

All polyester reinforcements can be reinforced with glass fibres to improve the stability characteristics of the product even more (NT/ST and FC/ST).





#### HOW TO CHOOSE A GOOD POLYMER DISTILLED BITUMEN MEMBRANE?

The polymer bitumen membranes, besides the previous characteristics, also differentiate based on two determining factors: weight/thickness and cold flexibility:

• WEIGHT/THICKNESS: The slated polymer bitumen membranes are identified by their weight (density) and can be 3.5 kg, 4 kg, or 4.5 kg per m<sup>2</sup>.

The black membranes are identified based on their standardised 3 mm or 4 mm thickness. They can also be supplied with a weight of 3 kg or 4 kg. Thickness is a quality index for the product.

 COLD FLEXIBILITY: This summarises the characteristics of the mixture based on standardised laboratory tests (UNI-EN 1109).

It does not, in any way, indicate product installation temperature nor its operating temperature.

It is a quality index for the product.

(For example: -10°C is better than 0°C).

### **SURFACE TREATMENTS**



THE POLYMER DISTILLED BITUMEN MEMBRANES CAN BE FINISHED ON THE UPPER AND LOWER SURFACE, BASED ON THE PRODUCT AND THE REQUIREMENTS. WITH VARIOUS TREATMENTS.

#### SLATED UPPER FINISH



**SLATING - Self-protecting treatment** achieved by adhesion to the upper surface of the membrane of natural mineral slate flakes, during the manufacturing process, and prefixed and controlled granulometry. The mineral pigments adopted for the realisation of the available shades are fixed with a particular ceramisation procedure. The standard colours are: natural grey, red, green and natural white. (Other colours upon request\*).

(\*) Upon request, it is available in the reflecta white mineral slate flakes.

#### UPPER FINISH

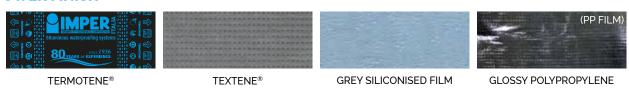


**TEXTENE® - Finishing treatment**, with high value added, obtained through a special procedure based on a textured polymeric fibre layer, preformed in film, applied to the surface. The treatment is usually carried out on the upper surface of the membrane, in certain cases it is done on the upper and lower surface.

#### THE TREATMENT IMPROVES:

- The aesthetic point of view The surface of the membrane takes on greater regularity and offers a smooth sensation to the touch;
- The ecological point of view Absence of talc allows better cleaning during installation operations and avoids releasing powder substances into the environment;
- Performance point of view The treatment enriches the technical profile of the membrane with particular attention to waterproofing duration, weldability of the sheets, their compactness and shearing resistance, to practicability of the surface and its paintability.

#### OWER FINISH



**TERMOTENE® - Thermoplastic film** the use of which, combined with the membrane, has been patented by IMPER ITALIA since 1977. The treatment is usually carried out on the lower surface of the membrane, in certain cases it is adopted on the lower and upper surface.

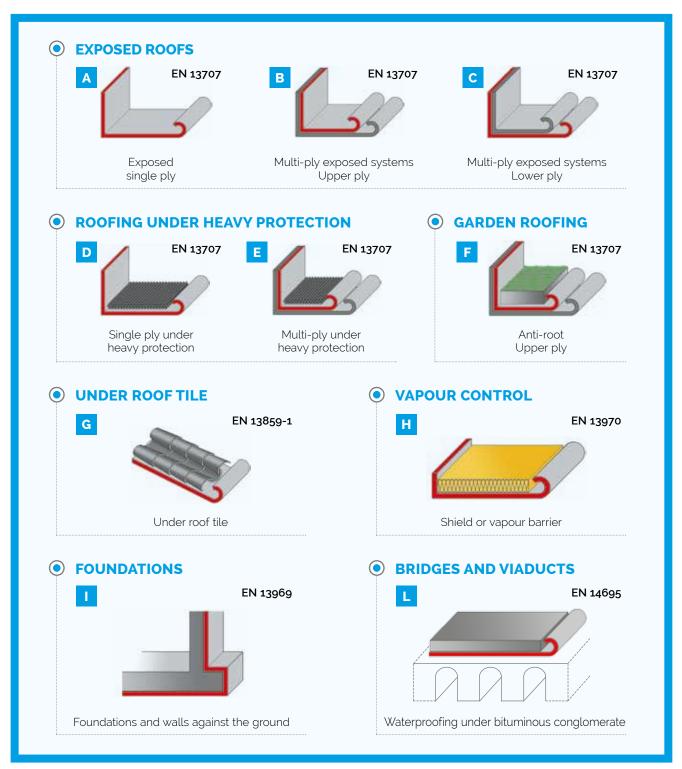
#### QUALITY OF THE TREATMENT:

- easy roll unwinding;
- **improves** adhesion of the membrane to the substrate;
- reduces the quantity of gas necessary to melt the mixture;
- improves cleaning and safety conditions of the construction sites (eliminating polyethylene non-stick sheets, reducing surface talc).



### INTENDED USE OF THE MEMBRANES

Foreseen based on the AISPEC-SITEB-MBDP guidelines\*



<sup>\* (</sup>For specifics regarding systems that can be made, consult technical services of Imper Italia SrI).

### INSTALLATION INSTRUCTIONS



### **HOW TO INSTALL CORRECTLY**

### A POLYMER DISTILLED BITUMEN MEMBRANE

PREPARE ALL SHEETS necessary for placing the layer, considering that they must overlap each other by 8 to 10 cm on the long side (longitudinal) and 12 to 15 cm for the short side (transversal). (See figure 1).

be glued only in points, or completely gluing of all sheets in relation to the slope of the laying surface and the stress that the waterproofing surface will be subject to.

**SHEET PLACEMENT** must always start from the lowest point (compared to the slope) of the laying plane, proceeding with "roof tile" placement.

It is good practice to make sure that the "head" joints (the ones on the short side) are staggered. Avoid "cross" joints. (See figure 2).

THE BURNER FLAME must be mainly aimed at the contact area between the roll and the laying surface and not directly on the lower face of the membrane to be glued to the same laying surface. When carrying out joints, it is best to heat both the membrane and the trowel simultaneously.

BONDING BY HEAT FUSION must always: be total at the joints (the overlap line); along the external perimeter of the entire layer (width of 100 cm) and on the trim areas for areas jutting out (e.g. chimneys) or built-in (e.g. drain unions); for the remaining parts of the laying surface (running parts) it can

THE LAYING SURFACE must be as flat as possible, smooth, without non-sticking parts, ruggedness, depressions, holes and it must be dry.

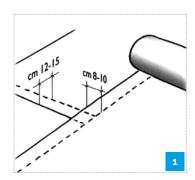
It must also be sloped to ensure regular water flow to the drainage collection points. All corners must be rounded using concrete shells or pre-fabricated profiles made of a suitable material.

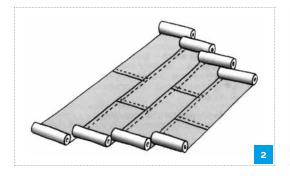
ON THE DUSTED SUBSTRATE one must lay the primer (IMPERTENE PRIMER, PRIMER BIT or PRIMER WB) to ensure adhesion. The primer must dry completely (1-3 hours) before proceeding with application of the polymer bitumen membranes.

WHEN CARRYING OUT THE SURFACE WITH MEMBRANES THAT ARE NOT SELF-PROTECTED, it is recommended to paint it with two crossed coats of a protective formula, choosing between SAVANA PAINT, LAMPROS BIT and BIVERALL, according to instructions from the related technical data sheets. These protections preserve their effectiveness for 3-5 years depending on the climate to which they are exposed.

# IT IS RECOMMENDED TO PLAN FOR PERIODIC MAINTENANCE OF THE SURFACE.

Any surfaces that do not have the proper slope for normal water flow cannot be painted with SAVANA PAINT.









## STORAGE AND HANDLING

#### **STORAGE**

The rolls must always be stored vertically. Do not overlay more than 2 pallets, making sure that a rigid dividing panel is placed in-between (avoid overlaying thin SBS or MBDP pallets).





#### **HANDLING**

The loading and unloading of the rolls must be carried out using the necessary precautions, without overturning.

#### **PROTECTION**

Possibly store the rolls protected from the sun and the weather.





#### **CONSTRUCTION SITE**

Adopt suitable precautions when handling pallets with a crane. (Weighing about 1000 kg).

#### **TEMPERATURE**

Make horizontal and vertical cuts to the heat-shrink cap to air out the pallets if stored, even briefly, under the sun.









## PARAFLEX -25°C (É

Elastomer polymer distilled bitumen waterproofing membranes (SBS).

The NT version has a "non-woven fabric" reinforcing mat made in polyester from continuous thread stabilised using mineral fibres, while the W version has "glass fibre" reinforcement.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARAFLEX NT	3 mm	PP Film	PP Film	FC/ST	10 x 1	25	C-E-I
	4 mm	PP Film (•) (•)	PP Film (•)	FC/ST	10 x 1	20	C-D-E-I-L
PARAFLEX ARD/HS	4mm+ard	24	PP Film	FC/ST	8 x 1	20	A-B-G
PARAFLEX ARD/ NS	4mm+ard	(*)	PP Film	FC/ST	8 x 1	20	A-B-G
PARAFLEX ARD/S	4.5 kg	24	PP Film	FC/ST	10 x 1	20	B-G
PARAFLEX ARD/ 5	4.5 kg	(*)	PP Film	FC/ST	10 x 1	20	B-G
PARAFLEX W	3 mm	PP Film	PP Film	W	10 x 1	25	С
	4 mm	PP Film	PP Film	W	10 x 1	20	С

<sup>(\*)</sup> Also available with Textene\* finish with the addition of 0.12 €/m². (\*) Also available with double Textene\* (D-TEX) finish with the addition of 0.60 €/m². (\*) Minimum order approx. 1000 m².



# TECNOFLEX -20°C (€

Elastomer polymer distilled bitumen waterproofing membranes (SBS).

The NT version has a "non-woven fabric" reinforcement made in polyester from continuous thread, while the W version has "glass fibre" reinforcement.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
TECNOFLEX NT	3 mm	PP Film	PP Film	FC	10 x 1	25	C-E-I
	4 mm	PP Film	PP Film	FC	10 x 1	20	C-D-E-I
	4 kg	24	PP Film	FC	10 x 1	25	B-G
TECNOFLEX NT/ARD	4.5 kg	(*)	PP Film	FC	10 x 1	20	B-G
TECNOPLEX NT/ARD	4 kg	24	PP Film	FC	10 x 1	25	B-G
	4.5 kg	(*)	PP Film	FC	10 x 1	20	B-G

<sup>(\*)</sup> Minimum order approx. 1000 m².











# > BITEXTENE FLEX MT -20°C (E

Pre-fabricated waterproofing membranes obtained through co-extrusion of a special elastomeric mixture obtained by complex dispersion of rubbers and elastophinic copolymers and a reinforcing mat of "non-woven fabric" from stabilised polyester.

Particularly indicated when optimal adhesion to the substrate is needed. Both surfaces are finished with the TEXTENE® treatment.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
BITEXTENE FLEX MT	3 mm	Textene	Textene	NT/ST	10 x 1	25	C-E-I
	4 mm	Textene	Textene	NT/ST	10 x 1	20	B-C-D-E-I

<sup>(●)</sup> Also available with textene® finish with the addition of 0.12 €/m². (●) Also available with double textene® (D-TEX) finish with the addition of 0.60 €/m². (\*) Minimum order approx. 1000 m².

# > TEXTENE FLEX -20°C (É

Pre-fabricated waterproofing membranes obtained by co-extruding a special elastomeric polymer distilled bitumen based compound with high performance level and a "non-woven fabric" reinforcing mat made of stabilised polyester.

The upper face is finished using the TEXTENE® treatment.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
TEXTENE FLEX	3 mm	Textene	PP Film	NT/ST	10 x 1	25	C-E-I
I EA I EINE FLEÄ	4 mm	Textene	PP Film	NT/ST	10 x 1	20	B-C-D-E-I

<sup>(\*)</sup> Minimum order approx. 1000 m².





## **STAR** -18°C (€

Pre-fabricated waterproofing membranes obtained by co-extruding a bitumen dispersion of micro compatibilising agents in an elastophinic polymer matrix and a "non-woven fabric" reinforcing mat made of dimensionally controlled stabilised polyester with mineral fibres positioned longitudinally.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
STAR	3 mm	With sand	Textene	NT/ST	10 x 1	25	C-E-I
	4 mm	With sand	Textene	NT/ST	10 x 1	20	B-C-D-E-I
STAR TEXTENE	3 mm	Textene	Textene	NT/ST	10 x 1	25	C-E-I
STAR TEXTENE	4 mm	Textene	Textene	NT/ST	10 x 1	20	C-E-I
STAR TEXTENE	4 kg	24	Textene	NT/ST	10 x 1	25	B-G
STAR TEXTENE	4.5 kg	(*)	Textene	NT/ST	10 x 1	20	B-G
STAR ARD	4 kg	24	Textene	NT/ST	10 x 1	25	B-G
SIAR ARD	4.5 kg	(*)	Textene	NT/ST	10 x 1	20	B-G

<sup>(\*)</sup> Minimum order approx. 1000 m².

#### **BENEFITS**

- High adhesion level of the STAR membranes, they are characterised by a high level of adhesion that allows greater anchoring to the substrate and greater seal of the junction between sheets.
- High elasticity.
- Flexibility at low temperatures.
- Resistance to U.V. rays.
- Lightweight and easy installation.
- Appealing aspect.





# LIGHTWEIGHT WITH LOW SPECIFIC WEIGHT



### (>)

# LEVIFLEX -5/-10/-15/-20°C (€

Light waterproofing membranes obtained by co-extrusion of a polymer distilled bitumen compound and micro compatibilising agents made using particular dosing and dispersion systems, and a polyester reinforcing mat, both "non-woven fabric" and continuous thread with dimensional stability controlled using longitudinally positioned mineral fibres.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
LEVIFLEX 20	3 mm	With sand	Termotene	FC/ST	10 x 1	25	C-E-I
LEVIPLEX 20	4 mm	With sand	Termotene	FC/ST	10 x 1	23	B-C-E-I
LEVIFLEX 20 ARD	4.5 kg		Termotene	FC/ST	10 x 1	18	B-G
LEVIPLEX 20 ARD	4.5 kg	(*)	Termotene	FC/ST	10 x 1	18	B-G
LEVIFLEX 15	3 mm	With sand	Termotene	FC/ST	10 x 1	25	C-E-I
LEVIPLEX 15	4 mm	With sand	Termotene	FC/ST	10 x 1	23	B-C-E-I
LEVIFLEX 15 ARD	4.5 kg		Termotene	FC/ST	10 x 1	18	B-G
LEVIPLEX 15 ARD	4.5 kg	(*)	Termotene	FC/ST	10 x 1	18	B-G
LEVIFLEX 10	3 mm	With sand	Termotene	FC/ST	10 x 1	25	C-E-I
LEVIPLEX 10	4 mm	With sand	Termotene	FC/ST	10 x 1	23	B-C-E-I
LEVIFLEX 10 ARD	4.5 kg		Termotene	FC/ST	10 x 1	18	B-G
LEVIPLEX 10 ARD	4.5 kg	(*)	Termotene	FC/ST	10 x 1	18	B-G
LEVIFLEX 5	3 mm	With sand	Termotene	FC/ST	10 x 1	25	C-E-I
LEVIFLEX 5	4 mm	With sand	Termotene	NT/ST	10 x 1	23	B-C-E-I
LEVIELEY CARD	4.5 kg	2%	Termotene	NT/ST	10 x 1	18	B-G
LEVIFLEX 5 ARD	4.5 kg	(*)	Termotene	NT/ST	10 x 1	18	B-G

<sup>(\*)</sup> Minimum order approx. 1000 m².

### **BENEFITS**

- Lightness.
- Dimensional stability.
- High level of adhesion.
- High level of elasticity.
- Quicker installation.
- Less gas consumption.
- The LEVIFLEX membranes are suitable for various types of waterproofing works.





# ELASTOPLASTOMERIC HIGH PERFORMANCE LEVEL



## PARALON PLUS ST -20°C (E

Pre-fabricated membranes for waterproofing that requires high levels of mechanical resistance.

They are obtained by co-extruding the PARALLOY® compound based on metallocene resin with selected molecular weight dispersed in bitumen, and a reinforcing mat of "non-woven fabric" made with continuous thread with dimensional stability controlled using longitudinally positioned mineral fibres.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARALON NT4 PLUS	3 mm	With sand (•)	Termotene	FC/ST	10 x 1	20	A-B-C-D-E-I-L
	4 mm	With sand (•)	Termotene	FC/ST	8 x 1	20	A-B-C-D-E-I-L
	4mm+ard	994	Termotene	FC/ST	10 x 1	18	A-B-G
PARALON ARD/HS PLUS ST	4mm+ard		Termotene	FC/ST	10 x 1	18	A-B-G
	4mm+ard	(*)	Termotene	FC/ST	10 x 1	18	A-B-G
	4.5 kg	200	Termotene	FC	10 x 1	20	B-G
PARALON ARD/S PLUS ST	4.5 kg		Termotene	FC	10 x 1	20	B-G
	4.5 kg	(*)	Termotene	FC	10 x 1	20	B-G

<sup>(•)</sup> Also available with textene $^{\circ}$  finish with the addition of 0.12  $\in$ / $m^2$ . (\*) Minimum order approx. 1000  $m^2$ .



### **ELASTOPLASTOMERIC**





## UNOSINT -20°C (€

Pre-fabricated waterproofing membranes obtained by co-extruding an elastoplastomeric polymer distilled bitumen based compound with a "non-woven fabric" reinforcing mat made of continuous thread polyester.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
UNOSINT	3 mm	With sand (•)	Termotene	FC	10 x 1	25	C-E-I
ONOSINI	4 mm	With sand (•)	Termotene	FC	10 x 1	20	B-C-E-I
	4 kg	24	Termotene	FC	10 x 1	25	B-G
	4.5 kg	2 %	Termotene	FC	10 x 1	20	B-G
UNOSINT ARD	4mm+ard	2.0	Termotene	FC	10 x 1	20	B-G
UNUSIN'I ARD	4 kg	(*)	Termotene	FC	10 x 1	25	B-G
	4.5 kg	(*)	Termotene	FC	10 x 1	20	B-G
	4mm+ard	(*)	Termotene	FC	10 x 1	20	B-G

<sup>(•)</sup> Also available with textene® finish with the addition of 0.12 €/m². (\*) Minimum order approx. 1000 m².



# SINTOPLENE -15°C (E

Pre-fabricated waterproofing membranes obtained by co-extruding an elastoplastomeric polymer distilled bitumen based compound with a "non-woven fabric" reinforcing mat made of continuous thread polyester.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS <sup>(*)</sup> OF USE
SINTOPLENE	3 mm	With sand (•)	Termotene	FC	10 x 1	25	C-E-I
	4 mm	With sand (•)	Termotene	FC	10 x 1	20	B-C-E-I
	4 kg	2 %	Termotene	FC	10 x 1	25	B-G
	4.5 kg	2.4	Termotene	FC	10 x 1	20	B-G
SINTOPLENE ARD	4mm+ard	2 %	Termotene	FC	10 x 1	20	B-G
SINTOPLENE ARD	4 kg	(*)	Termotene	FC	10 x 1	25	B-G
	4.5 kg	(*)	Termotene	FC	10 x 1	20	B-G
	4mm+ard	(*)	Termotene	FC	10 x 1	20	B-G

<sup>(•)</sup> Also available with textene® finish with the addition of 0.12 €/m². (\*) Minimum order approx. 1000 m².



### **ELASTOPLASTOMERIC**



# > PARAGUM ST -15°C (6

Pre-fabricated waterproofing membranes obtained by co-extruding an elastoplastomeric polymer distilled bitumen based compound with a "non-woven fabric" reinforcing mat made of continuous thread polyester stabilised using glass fibres.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARAGUM ST	3 mm	With sand	Termotene	FC/ST	10 x 1	25	B-C-E-I
FARAGON 31	4 mm	With sand	Termotene	FC/ST	10 x 1	20	A-B-C-D-E-I
PARAGUM ST ARD/S	4.5 kg		Termotene	FC/ST	10 x 1	20	B-G
PARAGOM ST ARD/S	4.5 kg	(*)	Termotene	FC/ST	10 x 1	20	B-G
PARAGUM ST ARD/HS	4mm+ard		Termotene	FC/ST	10 x 1	18	A-B-G
PARAGOM ST ARD/ NS	4mm+ard	(*)	Termotene	FC/ST	10 x 1	18	A-B-G

<sup>(\*)</sup> Minimum order approx. 1000 m².

# > TOP -10°C (E

Pre-fabricated waterproofing membranes obtained by co-extruding an elastoplastomeric polymer distilled bitumen based compound with a "non-woven fabric" reinforcing mat made of continuous thread polyester stabilised using glass fibres.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
TOP S	3 mm	With sand (•)	Termotene	FC/ST	10 x 1	25	C-E-I
1075	4 mm	With sand (•)	Termotene	FC/ST	10 x 1	20	B-C-E-I
	4 kg		Termotene	FC/ST	10 x 1	25	B-G
TOP ARD/S	4.5 kg	- T	Termotene	FC/ST	10 x 1	20	B-G
TOP ARD/ 5	4 kg	(*)	Termotene	FC/ST	10 x 1	25	B-G
	4.5 kg	(*)	Termotene	FC/ST	10 x 1	20	B-G
TOP N	3 mm	With sand	Termotene	W	10 x 1	25	С
TOPN	4 mm	With sand	Termotene	W	10 x 1	20	С
	4 kg		Termotene	W	10 x 1	20	B-G
TOP ARD/N	4.5 kg		Termotene	W	10 x 1	20	B-G
	4 kg	(*)	Termotene	W	10 x 1	20	B-G
	4.5 kg	(*)	Termotene	W	10 x 1	20	B-G

<sup>(</sup>  $\bullet$  ) Also available with textene® finish with the addition of 0.12  $\epsilon/m^2$ . (\*) Minimum order approx. 1000  $m^2$ .

### **ELASTOPLASTOMERIC**





## CENTRO -10°C (É

Pre-fabricated waterproofing membranes obtained by co-extruding an elastoplastomeric polymer distilled bitumen based compound with a "non-woven fabric" reinforcing mat made of dimensional stability polyester controlled using longitudinally positioned glass fibres.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
CENTRO -	3 mm	With sand (•)	Termotene	NT/ST	10 x 1	25	C-E-I
CENTRO	4 mm	With sand (•)	Termotene	NT/ST	10 x 1	23	B-C-E-I
	4 kg		Termotene	NT/ST	10 x 1	25	B-G
CENTRO ARD	4.5 kg	24	Termotene	NT/ST	10 x 1	20	B-G
CENTRO ARD	4 kg	(*)	Termotene	NT/ST	10 x 1	25	B-G
4	4.5 kg	(*)	Termotene	NT/ST	10 x 1	20	B-G

<sup>(</sup> $\bullet$ ) Also available with textene $^{\circ}$  finish with the addition of 0.12  $\epsilon/m^2$ . (\*) Minimum order approx. 1000  $m^2$ .



## SINTOGUM -5°C (E

Pre-fabricated waterproofing membranes obtained by co-extruding an elastoplastomeric polymer distilled bitumen based compound with a "non-woven fabric" reinforcing mat made of stabilised polyester (SINTOGUM PE) or reinforced "glass fibres" (SINTOGUM W).

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
SINTOGUM PE	3 mm	With sand (•)	Termotene	NT/ST	10 x 1	25	C-E-I
SINTOGOM PE	4 mm	With sand (•)	Termotene	NT/ST	10 x 1	23	B-C-E-I
	4 kg	200	Termotene	NT/ST	10 x 1	25	B-G
SINTOGUM PE ARD	4.5 kg	3 ¥	Termotene	NT/ST	10 x 1	23	B-G
SIN TOGOM PE ARD	4 kg	(*)	Termotene	NT/ST	10 x 1	25	B-G
	4.5 kg	(*)	Termotene	NT/ST	10 x 1	23	B-G
SINTOGUM W	3 mm	With sand	Termotene	VV	10 x 1	25	С
SIN LOGOW W	4 mm	With sand	Termotene	VV	10 x 1	23	С

<sup>(</sup> $\bullet$ ) Also available with textene $^{\circ}$  finish with the addition of 0.12  $\epsilon/m^2$ . (\*) Minimum order approx. 1000  $m^2$ .





## PARALON PLUS ST FIRE -15°C (E

Pre-fabricated membranes for waterproofing that requires high levels of mechanical resistance.

They are obtained by co-extruding the PARALLOY® compound based on metallocene resin with selected molecular weight dispersed in bitumen, duly using special non-toxic substance additives and a reinforcing mat of "non-woven fabric" made with continuous polyester thread.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARALON NT PLUS ST FIRE	3 mm	With sand	Termotene	FC/ST	10 x 1	25	C-E-I
	4 mm	With sand	Termotene	FC/ST	10 x 1	20	A-B-C-D-E-I
PARALON ARD/HS PLUS	4 mm+ard	2 %	Termotene	FC/ST	10 x 1	16	A-B-G
ST FIRE	4 mm+ard	(*)	Termotene	FC/ST	10 x 1	16	A-B-G
PARALON ARD/S PLUS ST FIRE	4.5 kg	24	Termotene	FC/ST	10 x 1	20	B-G
	4.5 kg	(*)	Termotene	FC/ST	10 x 1	20	B-G

(\*) Minimum order approx. 1000 m².



# INSTALLATION WITH COLD ADHESIVES



# PARALON COLD SYSTEM -20°C (É

Innovative "cold" waterproofing system, made from special pre-fabricated membranes glued to the installation plane using special ADITHENE adhesive.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARALON COLD	4 mm	With sand	Textene	FC/ST	10 x 1	20	A-B-C-E-I
PARALON FIRE COLD	4 mm	With sand	Textene	FC/ST	10 x 1	20	A-B-C-E-I
PARALON COLD HP	5 mm	With sand	Textene	FC/ST	10 x 1	16	A-B-C-D-E-I
PARALON COLD HP AR	5 mm	With sand	Textene	FC/ST	10 x 1	16	D-E-F-I

# **ADITHENE**

"Cold" bitumen based glue, elastomers, resins and particular solvent-based adhesive substances.

Ideal for cold gluing waterproofing membranes.

PRODUCT	WEIGHT	FINISH	FINISH
	THICKNESS	UPPER	LOWER
ADITHENE	25 kg can	1	1 x 33









# SHIELDS, VAPOUR BARRIERS AND INSULATING PANEL BONDING



# > VAPOBAR -10°C (E

Pre-fabricated waterproofing membranes obtained by co-extrusion of a special vapour waterproof polymer distilled bitumen compound and a reinforcing mat made of an aluminium sheet and a "glass fibre".

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
VAPOBAR	2 kg	With sand	Termotene	AL/VV	20 x 1	20	Н
	2 mm	With sand	Termotene	AL/VV	20 x 1	20	Н
	3 mm	With sand	Termotene	AL/VV	10 x 1	20	Н
	4 mm	With sand	Termotene	AL/VV	10 x 1	20	Н

# > ADEVAPOR 35 -15°C (€

Pre-fabricated membranes obtained by co-extrusion of a special compound, polymer distilled bitumen.

They are produced in the W, ST versions, respectively with "glass fibre" or stabilised polyester reinforced mat, or with reinforced "glass fibre" or stabilised polyester reinforcement mat, coupled with an aluminium sheet (vapour barrier).

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS <sup>(*)</sup> OF USE
ADEVAPOR 35 VV	3.5 mm	Textene	Termotene	VV	10 x 1	20	Н
ADEVAPOR 35 ST	3.5 mm	Textene	Termotene	NT/ST	10 x 1	20	Н
ADEVAPOR 35 AL	3.5 mm	Textene	Termotene	AL+VV	10 x 1	20	Н

### **ANTI-ROOT ROOF GARDENS**





# PARALON ANTI-ROOT −20°C (€

Pre-fabricated membrane for waterproofing that requires high levels of mechanical resistance.

They are obtained by co-extruding the PARALLOY® compound based on metallocene resin with selected molecular weight dispersed in bitumen, using suitable additives with special chemical substances (fatty acids, phenoxide, esterified) that give the product a long-lasting anti-root effect, and a reinforcing mat of "non-woven fabric" made with continuous polyester thread.

PRODUCT	WEIGHT	FINISH	FINISH	REINFORCING	SIZE	ROLLS FOR	FIELDS (*)
	THICKNESS	UPPER	LOWER	MAT	ROLL (M)	PALLET (N.)	OF USE
PARALON ANTI-ROOT	4 mm	With sand	Termotene	FC/ST	10 x 1	20	F

# UNOSINT ANTI-ROOT -15°C (E

Pre-fabricated membrane obtained by co-extrusion of an elasto-plastomeric polymer distilled bitumen based compound, using suitable additives with special chemical substances (fatty acids, phenoxide, esterified) that give the product a long-lasting anti-root effect, and a reinforcing mat of "non-woven fabric" made with continuous polyester thread.

PRODUCT	WEIGHT	FINISH	FINISH	REINFORCING	SIZE	ROLLS FOR	FIELDS (*)
	THICKNESS	UPPER	LOWER	MAT	ROLL (M)	PALLET (N.)	OF USE
UNOSINT ANTI-ROOT	4 mm	With sand	Termotene	FC	10 x 1	20	F



### PARKING LOTS, BRIDGES, VIADUCTS AND ROADS

# > SINTOPLENE 3 AV -10°C (E

Pre-fabricated membrane from elasto-plastomeric polymer distilled bitumen based compound, with a reinforcing mat of "non-woven fabric" made with continuous polyester thread placed in the thickness of the membrane, in complete synergy with it.

Particularly recommended as a support layer for preparing waterproofing systems for road, railroad and overpass works.

PRODUCT	WEIGHT	FINISH	FINISH	REINFORCING	SIZE	ROLLS FOR	FIELDS (*)
	THICKNESS	UPPER	LOWER	MAT	ROLL (M)	PALLET (N.)	OF USE
SINTOPLENE 3 AV	3 mm	With sand	Termotene	FC	10 x 1	20	L

# **> UNOSINT 4/25 AV −15°C (€**

Pre-fabricated membrane from elasto-plastomeric polymer distilled bitumen based compound, with a reinforcing mat of "non-woven fabric" made with continuous polyester thread weighing  $\geq$ 250 g/m² placed in the thickness of the membrane, in complete synergy with it.

Thanks to its high mechanical resistance to punching and perforation, it is recommended for waterproofing road, railroad and overpass works.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE	
UNOSINT 4/25 AV	4 mm	Textene	Termotene	FC	10 x 1	20	L	

# > THERMO STICKER PONTS HP -15°C (

Pre-fabricated self-adhesive membrane obtained by co-extrusion layered with special compounds based on selected bitumen, modified with elasto-thermoplastic polymers and a reinforcing mat of "non-woven fabric" made with stabilised continuous polyester thread.

Recommended particularly for waterproofing road, railroad and overpass works with single-ply applications in direct contact with the hot laid bitumen conglomerate.

PRODUCT	WEIGHT	FINISH	FINISH	REINFORCING	SIZE	ROLLS FOR	FIELDS (*)
	THICKNESS	UPPER	LOWER	MAT	ROLL (M)	PALLET (N.)	OF USE
THERMO STICKER PONTS HP	2.5 mm	Textene	Siliconised Film	FC/ST	10 x 1	20	L



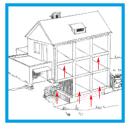
### PROTECTION FROM RADON GAS

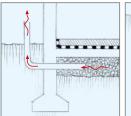


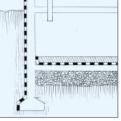
# > SICURBAR -10°C (E

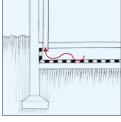
Pre-fabricated membrane with specific RADON gas resistance and impermeability characteristics.

PRODUCT	WEIGHT	FINISH	FINISH	REINFORCING	SIZE	ROLLS FOR	FIELDS (*)
	THICKNESS	UPPER	LOWER	MAT	ROLL (M)	PALLET (N.)	OF USE
SICURBAR	4 mm	With sand	Termotene	NT/ST	10 x 1	20	I









A few executions are illustrated in the following three examples.

#### **BUILDING PROTECTION**

The techniques for reducing Radon radiations are substantially of two types:

- Those that treat the residential unit.
- Those that treat the interface between the ground and the building.

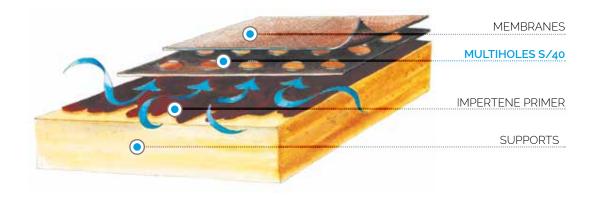


### PARTIAL ADHESION APPLICATION

# > MULTIHOLES S/40 (6

Perforated membrane for connection layers for waterproofing systems in controlled semi-adherence, made of polymer distilled bitumen with reinforced "glass fibre" reinforced mat.

PRODUCT	WEIGHT	FINISH	FINISH	REINFORCING	SIZE	ROLLS FOR	FIELDS (*)
	THICKNESS	UPPER	LOWER	MAT	ROLL (M)	PALLET (N.)	OF USE
MULTIHOLES S/40	1 kg	Termotene	Termotene	W	30 x 1	20	-





### **RESTORING OLD PAVEMENTS**



## PARAFLEX MS -25°C (É

Pre-fabricated membrane in elastomer polymer bitumen (SBS) produced by co-extrusion of a polyester "non-woven fabric" from continuous thread stabilised with mineral fibres and an innovative sealing mastic layered on the lower face, that gives the finished product remarkable adhesive characteristics on the installation surface and quick execution of flame sealed joints. Specification for restoring old bitumen waterproof surfaces in single-ply.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARAFLEX MS	4 mm+ard		Termotene	FC/ST	8 x 1	20	A-B-G
PARAFLEX IVIS	4 mm+ard	(*)	Termotene	FC/ST	8 x 1	20	A-B-G

<sup>(\*)</sup> Minimum order approx. 1000 m².



## PARALON PLUS MS -20°C (É

Pre-fabricated membrane for waterproofing that require high levels of mechanical resistance.

They are obtained by co-extrusion of the PARALLOY® compound based on metallocene resin base with selected molecular weight in bitumen. Specification for restoring old bitumen waterproof surfaces in single-ply.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
PARALON PLUS MS	4 mm+ard	2 %	Termotene	FC/ST	8 x 1	18	A-B-G
PARALON MS	4 mm+ard	(*)	Termotene	FC/ST	8 x 1	18	A-B-G

<sup>(\*)</sup> Minimum order approx. 1000 m².



# WATERPROOFING SYSTEMS SELF-ADHESIVE AND THERMO-ADHESIVE



# > STICKER HP -25°C (6

Pre-fabricated waterproofing membranes obtained by co-extrusion layered with special elastomeric-based compounds and particular adhesive additives.

The lower face of the membrane is protected by a grey silicone film that needs to be removed at the time of application. Available with the upper ply protected by a black coloured film (**DOUBLE FILM version**) or with the upper face protected by a ply of textured polypropylene fibres preformed into film (**TEXTENE® version**) particularly suitable with upper ply that can be coloured in multi-ply adhesive packets.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
STICKER HP TEXTENE	2 mm	Textene	Grey Siliconised Film	NT/ST	15 x 1	20	C-E-I
(with box)	3 mm	Textene	Grey Siliconised Film	NT/ST	10 x 1	20	B (•) -C-E-I
STICKER HP DOPPIO FILM	2 mm	Black HDPE Film	Grey Siliconised Film	NT/ST	15 x 1	20	С
(with box)	3 mm	Black HDPE Film	Grey Siliconised Film	NT/ST	10 x 1	20	С

<sup>(•)</sup> Duly coloured.

# STICKER HP ARD -25°C (E

Pre-fabricated self-adhesive waterproofing membrane obtained by co-extrusion layered with special elastomeric-based compounds and particular adhesive additives.

The lower face of the membrane is protected by a grey silicone film that needs to be removed at the time of application. Mineral slate flakes protect the upper face. Specific for upper finish layers in self-adhesive and under roof tile multi-ply.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
	3.5 kg	2.9	Grey Siliconised Film	NT/ST	8 x 1	20	B-G
STICKER HP ARD	4 kg	2.6	Grey Siliconised Film	NT/ST	8 x 1	20	B-G
(with box)	3.5 kg	(*)	Grey Siliconised Film	NT/ST	8 x 1	20	B-G
	4 kg	(*)	Grey Siliconised Film	NT/ST	8 x 1	20	B-G
STICKER HP ARD ENERGY SAVING	3.5 kg	Bianco Reflecta	Grey Siliconised Film	NT/ST	8 x 1	20	В
(with box)	4 kg	Bianco Reflecta	Grey Siliconised Film	NT/ST	8 x 1	20	В

<sup>(\*)</sup> Minimum order approx. 1000 m².

### MEMBRANES SELF-ADHESIVE

The STICKER self-adhesive membranes are recommended for waterproofing roofs for:

- structures that are easily flammable (WOOD),
- oflame-sensitive supports (INSULATING MATERIALS),
- industrial areas where the use of naked flames is prohibited.







# WATERPROOFING SYSTEMS SELF-ADHESIVE AND THERMO-ADHESIVE



### STICKER BIADESIVO -25°C (É

Pre-fabricated double sided waterproofing membranes obtained by co-extrusion with special elastomeric-based compounds and particular adhesive additives.

The lower and upper face of the membrane are protected by a grey silicone film, it must be removed at the time of application. Specification for self-adhesive multi-ply systems and as vapour shield under insulating panels glued directly to the self-adhesive membrane.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
STICKER BIADESIVO - DOUBLE SIDED (with box)	2 mm	Grey Siliconised Film Gr	ey Siliconised Film	NT/ST	15 x 1	20	Н
STICKER BIADESIVO - DOUBLE SIDED VAPOR STOP (with box)	2 mm	Grey Siliconised Film Gr	ey Siliconised Film	AL+NT/ST	15 x 1	20	Н



## STICKER -15°C (€

Pre-fabricated self-adhesive membrane obtained by co-extrusion layered with special compounds based on selected bitumen, modified with elasto-thermoplastic polymers and a reinforcing mat of "non-woven fabric" made with stabilised composite polyester.

The finish of the upper face is TERMOTENE®. Self-adhesive application upon removing the siliconised film.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
STICKER (with box)	3 mm	Black HDPE Film	Grey Siliconised Film	NT/ST	10 x 1	20	C-E-I
STICKER (without box)	3 mm	Black HDPE Film	Grey Siliconised Film	NT/ST	10 x 1	25	C-E-I
STICKER TEXTENE (with box)	3 mm	Textene	Grey Siliconised Film	NT/ST	10 x 1	20	C-E-I
STICKER (without box)	3 mm	Textene	Grey Siliconised Film	NT/ST	10 x 1	25	C-E-I



## STICKER ARD -15°C (E

Pre-fabricated self-adhesive waterproofing membranes obtained by co-extrusion layered with special elastoplastomeric based compounds and particular adhesive additives.

The lower face of the membrane is protected by a grey silicone film that needs to be removed at the time of application. Mineral slate flakes protect the upper face. Specific for under roof tile. Self-adhesive application upon removing the siliconised film.

PRODUCT	WEIGHT THICKNESS	FINISH UPPER	FINISH LOWER	REINFORCING MAT	SIZE ROLL (M)	ROLLS FOR PALLET (N.)	FIELDS (*) OF USE
	3.5 mm		Grey Siliconised Film	NT/ST	8 x 1	20	G
STICKER ARD	3.5 mm	(*)	Grey Siliconised Film	NT/ST	8 x 1	20	G
(with box)	4 mm		Grey Siliconised Film	NT/ST	8 x 1	20	G
	4 mm	(*)	Grey Siliconised Film	NT/ST	8 x 1	20	G
	3.5 mm		Grey Siliconised Film	NT/ST	10 x 1	25	G
STICKER ARD	3.5 mm	(*)	Grey Siliconised Film	NT/ST	10 x 1	25	G
(without box)	4 mm		Grey Siliconised Film	NT/ST	10 x 1	25	G
	4 mm	(*)	Grey Siliconised Film	NT/ST	10 x 1	25	G

<sup>(\*)</sup> Minimum order approx. 1000 m².





### **IMPERTENE PRIMER**

Highly covering bituminous primer for cement or porous substrates in general, based on selected bitumen in suitable solvents.

Used on concrete surface before installing bituminous waterproofing products in order to set the residual dustiness of the substrate and favour adhesion of the waterproofing materials.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PRICE PER PALLET (N.)
	5 litre can	1	1 x 125
IMPERTENE PRIMER	10 litre can	1	1 x 80
	20 litre can	1	1 x 48



### **PRIMER BIT**

Solvent bituminous primer for cement and in general porous substrates.

Significant fastening and impregnating effect, encouraging adhesion when applying bituminous membranes.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PRICE PER PALLET (N.)	
PRIMER BIT	20 litre can	1	1 x 48	



### **PRIMER WB**



#### Water based primer with selected bitumen for cement and porous substrates in general.

It replaces the most common solvent-based primers; it is not flammable and does not release foul odours during the application and drying phase. To be applied before laying the bituminous membranes in order to promote adhesion and fixing of residual dustiness.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PRICE PER PALLET (N.)
	5 litre can	1	1 x 125
PRIMER WB	10 litre can	1	1 x 80
	20 litre can	1	1 x 33





# PROTECTIVE PAINTS FOR WATERPROOFING PAVEMENTS

## (>)

### **NEROBIT**

Black protective paint based on bitumen oxidised in quick drying solvent ("Tar varnish").

Water repellent and anti-corrosion protective agent for metal structures and gutters, for painting concrete tanks or objects in general and as a primer for metal or cement surfaces to be covered with bituminous products. Used in the naval industry to protect boxes, anchors and chains.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PALLET
	1 litre can	24	24 x 10
NEROBIT	3 litre can	8	8 x 12
	5 litre can	1	1 x 125
	10 litre can	1	1 x 80
	20 litre can	1	1 x 48



### **PARWENOL**

Metallic paint in synthetic-bituminous carrier for polymer distilled bitumen membranes.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PRICE PER PALLET (N.)
PARWENOL	5 litre can	1	1 x 48



### **ELASTOMUL G**







Water dispersed synthetic polymer based paint with a particularly elastic structure specific for coating bituminous membranes.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PRICE PER PALLET (N.)
ELASTOMUL G - White Reflecta	20 kg Bucket 1		1 x 33
ELASTOMUL G - Grey	20 kg Bucket	20 kg Bucket 1	
ELASTOMUL G - Oxide Red	20 kg Bucket	1	1 x 33
ELASTOMUL G - Green	20 kg Bucket	1	1 x 33



### **ELASTOMUL SB**

Solvent-based protective paint for waterproofing pavements in polymer distilled bitumen membrane.

PRODUCT	PACKAGE	SMALLEST UNIT OF SALE	PRICE PER PALLET (N.)
ELASTOMUL B - Bianco	20 kg can	1	1 x 33
ELASTOMUL B - Grey	20 kg can	1	1 x 33
ELASTOMUL B - Oxide Red 20 kg can		1	1 x 33
ELASTOMUL B - Green	20 kg can	1	1 x 33



### **GENERAL SALES CONDITIONS**

- 1) The goods are considered delivered ex-works at our Mappano Plant.
- 2) The goods always travel at the risk and responsibility of the Purchaser, even if shipped free port.
- **3)** Any delivery defect must be immediately contested with the carrier through "with reserve" or on the copy of the delivery note.
- **4)** Once 8 days have passed from when the goods are received, claims will not be accepted. No return of goods, even if purchaser substantiates it with a motivation, will be accepted unless previously agree upon and authorised by us.
- 5) The prices shown are exclusive of VAT (at the current rate).
- **6)** Quotations are subject to variations due to sudden increase in raw material prices. The company reserves the right to change the price list at any time.
- 7) No liability is accepted for delivery delays, even within the explicitly accepted terms.









